1035-42-1321 **Christine Carracino*** (carracic@stockton.edu), Natural Sciences and Mathematics, The Richard Stockton College of New Jersey, Pomona, NJ , and **Jennifer Halfpap**. *Size and Derivative Estimates for the Szegö Kernel on a Model Non-Pseudoconvex Domain.* Preliminary report.

We can consider the Szegö kernel $S(z,\zeta)$ on the boundary of model domains $\Omega = \{(z_1, z_2) \in \mathbb{C}^2 | -\mathrm{Im} z_2 > b(\mathrm{Re} z_1)\}$. If b is convex, the only singularities of $S(z,\zeta)$ are on the diagonal $z = \zeta$. When the function b is a certain non-convex function, we show that near certain points, there are singularities off the diagonal.

We will discuss the size estimates that show this and some work on the derivative estimates. (Received September 20, 2007)